U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/PTO 10/651,188 Application Number August 28, 2003 Filing Date INFORMATION DISCLOSURE Ronald L. Mahany First Named Inventor STATEMENT BY APPLICANT 2666 Group Art Unit Dang T. Ton Examiner Name (use as many sheets as necessary) Attorney Docket Number 14426US02 6 of

	<u> </u>		U.S. PATENT DO	CUMENTS	
Examiner Initial*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	2,942,072	06-21-1960	Cunningham	
	A2	3,586,977	06-22-1971	Lustig	
	A3	3,826,900	07-30-1974	Moellering	
	A4	3,876,863	04-08-1975	Boone	
	A5	3,908,088	09-23-1975	Gutleber	
	A6	4,004,098	01-18-1977	Shimasaki	
	A7	4,004,225	01-18-1977	Ganssmantel	
	A8	4,025,734	05-24-1977	Aloupis	
	A9	4,054,753	10-18-1977	Kaul et al.	
	A10	4,116,237	09-26-1978	Birch	
	A11	4,251,865	02-17-1981	Moore et al.	
	A12	4,301,530	11-17-1981	Gutleber	
	A13	4,367,378	01-04-1983	Jordan	
	A14	4,415,065	11-15-1983	Sandstedt	
	A15	4,418,277	11-29-1983	Tremmel et al.	
	A16	4,460,120	07-17-1984	Shepard et al.	
	A17	4,471,218	09-11-1984	Culp	
	A18	4,513,447	04-23-1985	Carson	
	A19	4,539,706	09-03-1985	Mears et al.	
	A20	4,549,264	10-22-1985	Carroll et al.	
	A21	4,549,293	10-22-1985	Christian	
,	A22	4,553,262	11-12-1985	Coe	
	A23	4,606,044	08-12-1986	Kudo	
	A24	4,639,914	01-27-1987	Winters	
	A25	4,672,658	06-09-1987	Kavehrad et al.	
	A26	4,677,657	06-30-1987	Nagata et al.	
	A27	4,697,243	09-29-1987	Moore et al.	
	A28	4,745,632	05-17-1988	Duffy	
	A29	4,773,032	09-20-1888	Uehara et al.	
	A30	4,775,928	10-04-1888	Kendall et al.	
	A31	4,789,983	12-06-1988	Acampora et al.	
	A32	4,833,726	05-23-1989	Shinoda et al.	
	A33	4,850,006	07-18-1989	Sasaki et al.	

EXAMINER D	DATE CONSIDERED	
SIGNATURE		halitation if not in conformance and not considered. Include

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached

Sheet

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. Send TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction act of 1995, no persona are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary))

6 Of Sheet

Complete if Known					
Application Number	10/651,188				
Filing Date	August 28, 2003				
First Named Inventor	Ronald L. Mahany				
Group Art Unit	2666				
Examiner Name	Dang T. Ton				
Attorney Docket Number	14426US02				

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		U.S. PATENT DO	CUMENTS	
Examiner Initial*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A34	4,857,716	08-15-1989	Gombrich et al.	
-10-110000000	A35	4,906,989	03-06-1990	Kasugai	
	A36	4,916,441	04-10-1990	Gombrich	
	A37	4,924,461	05-08-1990	Amamiya et al.	
	A38	4,945,532	07-31-1990	Hald	
	A39	4,955,038	09-04-1990	Lee et al.	
	A40	4,972,456	11-20-1990	Kaczmarek et al.	
	A41	5,006,699	04-09-1991	Felkner et al.	
	A42	5,006,996	04-09-1991	Nakamura et al.	
	A43	5,007,050	04-09-1991	Kasparian et al.	
	A44	5,008,953	04-16-1991	Dahlin et al.	
	A45	5,020,135	05-28-1991	Kasparian et al.	
	A46	5,023,824	06-11-1991	Chadima, Jr. et al.	
	A47	5,025,486	06-18-1991	Klughart	
	A48	5,029,183	07-02-1991	Tymes	
	A49	5,029,232	07-02-1991	Nall	
	A50	5,031,098	07-09-1991	Miller et al.	
	A51	5,042,082	08-20-1991	Dahlin	
	A52	5,044,010	08-27-1991	Frenkiel et al.	
	A53	5,046,066	09-03-1991	Messenger	
	A54	5,090,054	02-25-1992	Grilliot et al.	
	A55	5,103,448	04-07-1992	Barnes et al.	
	A56	5,142,700	08-25-1992	Reed	
	A57	5,157,187	10-20-1992	Le et al.	
	A58	5,157,687	10-20-1992	Tymes	
	A59	5,179,721	01-12-1993	Comroe et al.	
	A60	5,187,646	02-16-1993	Koch	
	A61	5,189,291	02-23-1993	Siemiatkowski	
	A62	5,208,449	05-04-1993	Eastman et al.	
	A63	5,218,187	06-08-1993	Koenck et al.	
	A64	5,220,564	06-15-1993	Tuch et al.	
	A65	5,220,678	06-15-1993	Feei	
	A66	5,227,614	07-13-1993	Danielson et al.	
<u> </u>	A67	5,239,622	08-24-1993	Best et al.	
	A68	5,241,542	08-31-1993	Natarajan et al.	
	A69	5,272,324	12-21-1993	Blevins	

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ²Sec Kinds Codes of USPTO Patent Documents at www uspto gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction act of 1995, no persona are required to respond to a collection of information unless it displays a valid OMB control number.

Complete if Known Substitute for form 1449A/PTO 10/651,188 Application Number August 28, 2003 Filing Date INFORMATION DISCLOSURE Ronald L. Mahany First Named Inventor STATEMENT BY APPLICANT 2666 Group Art Unit Examiner Name Dang T. Ton (use as many sheets as necessary)) 14426US02 Attorney Docket Number

6

			U.S. PATENT DO	CUMENTS	
Examiner Initial*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A70	5,276,686	01-04-1994	Ito	
	A71	5,276,918	01-04-1994	Cornforth et al.	
	A72	5,289,378	02-22-1994	Miller et al.	
	A73	5,295,154	03-15-1994	Meier et al.	
	A74	5,335,356	08-02-1994	Anderson	
	A75	5,339,316	08-16-1994	Diepstraten	
	A76	5,349,678	09-20-1994	Morris	
	A77	5,375,163	12-20-1994	Kamimot et al.	
	A78	5,389,917	02-14-1995	LaManna	
	A79	5,404,577	04-04-1995	Zuckerman	
	A80	5,422,934	06-06-1995	Massa	
	A81	5,602,854	02-11-1997	Luse et al.	
	A82	5,657,317	08-12-1997	Mahany et al.	
1.00000000	A83	5,748,619	05-05-1998	Meier	
	A84	5,797,099	08-18-0998	Ejzak et al	
	A85	6,006,100	12-21-1999	Koenck et al.	

		FOREIG	N PATENT DO	CUMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	T ⁶
Initials*	No. 1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if knawn)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	ļ
	B1	AU 632055	12-17-1992	Mahany et al.		
	B2	AU B-83262/91 (641541B2)	08-03-1989	Mahany et al.		
	B3	AU A-80350/91	01-16-1992	Zuckerman et al.		ļ
·	B4	AU B-80350/91	01-16-1992	Zuckerman et al.		ļ
	B5	BE 1002234	10-30-1990	Schultz et al.		X
	B6	CA 1,316,218	04-13-1993	Mahany et al.		
	B7	CA 2,045,241	01-14-1992	Zuckerman et al.		
	B8	EP 0 280 543 A2	08-31-1988	Kasugal		<u> </u>
	B9	EP 0 465 971 A2	01-15-1992	Zuckerman et al.		<u> </u>
	B10	ES 2 014 740	07-16-1990	Schultz et al.		<u> X</u>
	B11	GB 2 196 766 A	05-1988	Pitayanukul et al.		
	B12	GB 2 221 426 A	02-17-1993	Mahany et al.		
	B13	GB 2 223 914 A	04-18-1990	Mahany et al.		
MMHMW	B14	GB 2 223 914 B	11-18-1992	Mahany et al.		
	B15	IT 1230308	10-18-1991	Schultz et al.		X

DATE CONSIDERED **EXAMINER**

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy

Sheet

of tims form with next communication to appreant.

Applicant's unique citation designation number (optional).

See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible.

Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction act of 1995, no persona are required to respond to a collection of information unless it displays a valid OMB control number.

Complete if Known Substitute for form 1449A/PTO 10/651,188 Application Number August 28, 2003 Filing Date INFORMATION DISCLOSURE Ronald L. Mahany First Named Inventor STATEMENT BY APPLICANT 2666 Group Art Unit **Examiner Name** Dang T. Ton (use as many sheets as necessary)) 14426US02 Attorney Docket Number 6 Of Sheet

		FOREIG	N PATENT DO	CUMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
Initials*	No. 1	Country Code ³ -Number ⁴ -Kind Code ⁶ (if known)	MM-DD-YYYY	Applicant of Cited Document		<u> </u>
	B16	JP 61-196364	08-1986	Takeshi		
	B17	JP 63-27969	02-1988	Ohkawara et al.		
	B18	MX PA/a/1991/000168	07-11-1991	Zuckerman et al.		<u> </u>
	B19	PCT WO88/08649	11-1988	MacNak et al.		Ļ
	B20	PCT WO92/02084	02-06-1992	Koenck et al.		<u> </u>
	B21	PCT WO94/15413	07-07-1994	Mahany et al.		

		THE PAGE NAME OF THE PA
		OTHER ART NON PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	Respondent Qualcomm Incorporated's Notice Of Prior Art, with Exhibit B attached thereto
	C2	Qualcomm's Response To Interrogatory 3, with Exhibit A attached thereto
	C3	SCHMID, "Lunar Far-Side Communication Satellites", Goddard Space Flight Center, NASA TN D-4509, 06/12/1968, pp. 1-19
	C4	BARR, "Apollo Communications Configuration Handbook", NASA Manned Space Flight System, FB69-3701, 02/24/1969
	C5	CONSTANTINOU, "Mobile Communication-Channel Modelling", British Telecommunications Engineering, 08/1990, Vol. 9, pp. 84-85
	C7	DAVEY, "Data Preparation And Transmission In The Royal Air force Integrated Supply System", The Computer Journal, 01/1964, Vol. 6, pp. 219-222
	C8	DAVIS, "Man-In-Space Communications Subsystem", The LEM Program At RCA – Twelve Technical Papers By RCA Scientists And Engineers, 1966, pp. 21-29
	C9	LEUNG, "Diversity Interconnection Of Wireless Terminals To Local Area Networks Via Radio Bridges", Electronics Letters, 02/27/1992, Vol. 28, No. 5, pp. 489-490
	C10	LEUNG, "Internetworking Wireless Terminals To Local Area Networks Via Radio Bridges", IWC 1992, IEEE, 1992, pp. 126-129
	C11	LINDSEY, "Lunar Surface Transmission Loss For The Apollo Astronaut", NASA Technical Note, NASA TN D-4915, 12/1968, pp. 1-25
	C12	MURPHY, Interactions Between Terminal Mobility And Personal Mobility, 2 nd International Conference On Universal Personal Communications – Conference Record Volume I, IEEE, 1993, pp. 198-201
	C15	Proceedings Of The Apollo Unified S-Band Technical Conference, Goddard Space Flight Center/NASA, 07/14-15/1965, pp. 1-302

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

of this form with next communication to approam.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction act of 1995, no persona are required to respond to a collection of information unless it displays a valid OMB control number.

Complete if Known Substitute for form 1449A/PTO 10/651,188 Application Number August 28, 2003 Filing Date INFORMATION DISCLOSURE Ronald L. Mahany First Named Inventor STATEMENT BY APPLICANT 2666 Group Art Unit **Examiner Name** Dang T. Ton (use as many sheets as necessary)) 14426US02 Attorney Docket Number 6 Of Sheet

		OTHER ART NON PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C16	RUBIN, "Performance Of Double-Tier Access-Control Schemes Using A Polling Backbone For Metropolitan And Interconnected Communication Networks", IEEE Journal On Selected Areas In Communications, 1993, Vol. SAC-5, No. 9, pp. 34-39
	C17	SANDERSON, "Watch - A Low-Cost, Secure-Item Monitoring System", 1987, pp. 310-315
	C19	SCHILIT, "The PARCTAB Mobile Computing System", 1993 IEEE, 1993, pp. 34-39
	C21	"GE Mobile Radio MASTR® Executive II Vehicular Repeater Maintenance Manual LBI 32572A
	C22	"RCA & Apollo 15", RCA Government Engineering, Thirteen Technical Papers By RCA Engineers And Scientists, RCA Government Engineering, 1972, pp. 24-25
	C23	"RCA 'Radar Eyes,' Advanced Electronics To Help Apollo 11 Astronauts Land On Moon", RCA News, Special Apollo Edition, 07/1969
	C24	"Special Report: Communications On The Moon", Electronics World, 08/1969, pp. 23-25 and 56-67
	C25	Trucking Firm Uses Mobile-Radio Data Terminals To Communicate between Drivers And Dispatchers, Communications News, 08/1968, Vol. 23, No. 8, p. 39(1)
	C26	GOODMAN, "Wireless Personal Communication Systems", 1997
	C27	Press Information: Space Shuttle Transportation System, Rockwell International, 08/1981, pp. 1-463, esp. Ch. 17
	C29	IEEE Standard Dictionary of Electrical & Electronics Terms – 3 rd Edition, pp. 539, 847, 08/10/1984
	C30	IEEE Standard Dictionary of Electrical & Electronics Terms – 5 th Edition, pp. 779, 780, 1234, 1235
	C36	Specifications of the Bluetooth System, CORE, Specification Vol. 1, Version 1.1, 02/22/2001
	C39	Profile Test Specification, Test Suite Structure (TS) and Test Purposes (TP) for Hands-Free Profile
	C43	Order #1, Protective Order, 06/21/2005
	C44	Newton's Telecom Dictionary, 1993
	C54	DARLING, "Real-Time Mobile RF Terminals Boost Inventory Efficiency", Pulp & Paper, 04/1990, pp. 188-190
	C55	O'BRIEN, The Invaluable "Walkie-Talkie": Is The Portable Unit An Understimated Asset For Fire Service Communications?, Fire Engineering, 11/1956, pp. 1060-1062
	C56	OLSEN et al., "Apollo Experience Report: Command And Service Module Controls And Displays Subsystem", NAS 1.14:D-8301, 1979, pp. 1-21

COLOR MALE D	DATE CONSIDERED
EXAMINER	DATE CONCIDENCE
1	<u> </u>

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction act of 1995, no persona are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known Substitute for form 1449A/PTO 10/651,188 Application Number August 28, 2003 Filing Date INFORMATION DISCLOSURE First Named Inventor Ronald L. Mahany STATEMENT BY APPLICANT Group Art Unit 2666 Dang T. Ton **Examiner Name** (use as many sheets as necessary)) 14426US02 Attorney Docket Number Sheet 6 Of 6

OTHER ART NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
	C57	SCARINGE, Real-Time Data Collection Via Mobile Wireless Computer Terminals, Advance Manufacturing Systems: Proceedings Of The AMS '86 Exposition And Conference, 06/24/1986-06/26/1986, pp. 745-749	

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.